<u> Application No.: 09/646,778</u>

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

	1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
	2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
	3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
X	4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
	5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
	6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
	7. Other:
Ap	7. Other: plicant Must Provide:
Ap	
	plicant Must Provide:
	plicant Must Provide: An initial or <u>substitute</u> computer readable form (CRF) copy of the "Sequence Listing". An initial or <u>substitute</u> paper copy of the "Sequence Listing", as well as an amendment directing its entry
	plicant Must Provide: An initial or <u>substitute</u> computer readable form (CRF) copy of the "Sequence Listing". An initial or <u>substitute</u> paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification. A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or
X X Fo Fo Fo Fo Fo Fo	plicant Must Provide: An initial or <u>substitute</u> computer readable form (CRF) copy of the "Sequence Listing". An initial or <u>substitute</u> paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification. A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/646,778
	: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1 Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8 Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10 Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.
	AMC/MH - Biotechnology Systems Branch - 08/21/2001

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<400> 1

cgggatttta cccggtttaa aaagcgaacc ttctcccggc tacacccgaa ggtacccaaa 60 tatgggtagg tccggttttc caacttggca aacgtatggg gaagcccggg gatggcttcc 120

(see pp. 2-3 for more enou)

<210> 278 <211> 401 <212> PRT <213> Homo sapiens (global luon) The constraint errors shown exist throughout the Listing. Please check all sequences for similar errors.																
<213> Homo sapiens <400> 278 Met Pro Pasn Phel Cys (Ala CAla C Pro Pasn Cys Three Arg Lys Ser Three Gln amino																
<400> <i>L</i>	218	per		Cual	7012	/ / / / / / / / / / / / / / / / / / /	prol	$\frac{1}{2}$	$l_{\rm cvs}$	$\chi_{\rm Thr}$	' ' _{Ara} ∉	$L_{\rm Lvs}$	ser ($I_{Thr} \mathcal{J}$	Gln	amino
Met L	-Pro \ /	✓Asn ✓	f l	5	f /	l'	/	/ / :	\int_{0}^{10}	/	j	/ /	/	L 15	/	acids
Ser	Asp '	$J_{ m Leu}J$	Ala 20	Phe	Phe	Arg	Phe D	Pro 25	Arg	Asp	Pro	Ala	Arg 30	Cys	Gln	
Lys	Trp	Val 35	Glu	Asn	Cys	Arg	Arg 40	Ala	Asp	Leu	Glu	Asp 45	Lys	Thr	Pro	
Asp	Gln 50	Leu	Asn	Lys	His	Tyr 55	Arg	Leu	Cys	Ala	Lys 60	His	Phe	Glu	Thr	
Ser 65	Met	Ile	Cys	Arg	Thr 70	Ser	Pro	Tyr	Arg	Thr 75	Val	Leu	Arg	Asp	Asn 80	
Ala	Ile	Pro	Thr	Ile 85	Phe	Asp	Leu	Thr	Ser 90	His	Leu	Asn	Asn	Pro 95	His	
Ser	Arg	His	Arg 100	Lys	Arg	Ile	Lys	Glu 105	Leu	Ser	Glu	Asp	Glu 110	Ile	Arg	
Thr	Leu	Lys 115	Gln	Lys	Lys	Ile	Asp 120	Glu	Thr	Ser	Glu	Gln 125	Glu	Gln	Lys	
His	Lys 130	Glu	Thr	Asn	Asn	Ser 135	Asn	Ala	Gln	Asn	Pro 140	Ser	Glu	Glu	Glu	
Gly 145	Glu	Gly	Gln	Asp	Glu 150	Asp	Ile	Leu	Pro	Leu 155	Thr	Leu	Glu	Glu	Lys 160	
Glu	Asn	Lys	Glu	Tyr 165	Leu	Lys	Ser	Leu	Phe 170	Glu	Ile	Leu	Ile	Leu 175	Met	
Gly	Lys	Gln	Asn 180	Ile	Pro	Leu	Asp	Gly 185	His	Glu	Ala	Asp	Glu 190	Ile	Pro	
Glu	Gly	Leu 195	Phe	Thr	Pro	Asp	Asn 200	Phe	Gln	Ala	Leu ⁻	Leu 205	Glu	Cys	Arg	
Ile	Asn 210		Gly	Glu	Glu	Val 215	Leu	Arg	Lys	Arg	Phe 220	Glu	Thr	Thr	Ala	
Val 225	Asn	Thr	Leu	Phe	Cys 230	Ser	Lys	Thr	Gln	Gln 235	Arg	Gln	Met	Leu	Glu 240	
Ile	Cys	Glu	Ser	Cys 245	Ile	Arg	Glu	Glu	Thr 250	Leu	Arg	Glu	Val	Arg 255	Asp	
Ser	His	Phe	Phe 260		Ile	Ile	Thr	Asp 265	Asp	Val	Val	Asp	Ile 270	Ala	Gly	

Glu	Glu	His 275	Leu	Pro	Val	Leu	Val 280	Arg	Phe	Val	Asp	Glu 285	Ser	His	Asn
Leu	Arg 290	Glu	Glu	Phe	Ile	Gly 295	Phe	Leu	Pro	Tyr	Glu 300	Ala	Asp	Ala	Glu
Ile 305	Leu	Ala	Val	Lys	Phe 310	His	Thr	Met	Ile	Thr 315	Glu	Lys	Trp	Gly	Leu 320
Asn	Met	Glu	Tyr	Cys 325	Arg	Gly	Gln	Ala	Tyr 330	Ile	Val	Ser	Ser	Gly 335	Phe
Ser	Ser	Lys	Met 340	Lys	Val	Val	Ala	Ser 345	Arg	Leu	Leu	Glu	Lys 350	Tyr	Pro
Gln	Ala	Ile 355	Tyr	Thr	Leu	Cys	Ser 360	Ser	Cys	Ala	Leu	Asn 365	Met	Trp	Leu
Ala	Lys 370	Ser	Val	Pro		Met 375	Gly	Val	Ser	Val	Ala 380	Leu	Gly	Thr	Ile
Glu 385	Glu	Val	Cys	Ser	Phe 390	Phe		Xxx) Ile	Thr 395	Thr	Thr	Ala	Phe	Arg 400
							11	·							

use Xaa ord explain in (2207-1223)
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See (.823 d) Sequence Rules and item 9 on Evan Summary Sheet

That has been detected in the Sequence Listing. each secure using n or Xaa.

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